

WHAT IS CLAIMED IS:

1. A process for producing a tetrafluoroethylene polymer, which comprises polymerizing tetrafluoroethylene in an aqueous medium in the presence of a dispersant, a stabilizer and a polymerization initiator, wherein the polymerization initiator is a redox polymerization initiator comprising a halogen acid salt YXO_3 /a sulfite Z_2SO_3 wherein X is a chlorine atom, a bromine atom or an iodine atom, Y is a hydrogen atom, ammonium, an alkali metal or an alkaline earth metal, and Z is ammonium, an alkali metal or an alkaline earth metal.

2. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein both the halogen acid salt and the sulfite of the redox polymerization initiator are added to the polymerization system simultaneously, or either the halogen acid salt or the sulfite is added preliminarily and the other is added intermittently or continuously during the polymerization.

3. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein the halogen acid salt is preliminarily added to the polymerization system, and the sulfite is intermittently or continuously added during the polymerization.

4. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein the halogen acid salt is a bromate.

5. The process for producing a tetrafluoroethylene

polymer according to Claim 1, wherein the halogen acid salt is potassium bromate, and the sulfite is ammonium sulfite.

6. The process for producing a tetrafluoroethylene
5 polymer according to Claim 5, wherein potassium bromate is preliminarily added to the polymerization system, and ammonium sulfite is intermittently or continuously added during the polymerization.

7. The process for producing a tetrafluoroethylene
10 polymer according to Claim 1, wherein the polymerization initiator is used in an amount of from 1 to 600 ppm, respectively, based on the mass of water.

8. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein the polymerization 15 initiator is used in an amount of from 1 to 300 ppm, respectively, based on the mass of water.

9. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein the polymerization initiator is used in an amount of from 1 to 100 ppm, 20 respectively, based on the mass of water.

10. The process for producing a tetrafluoroethylene polymer according to Claim 1, wherein the dispersion is a surfactant of a fluorocarbon type.

11. The process for producing a tetrafluoroethylene 25 polymer according to Claim 1, wherein the stabilizer is paraffin wax.

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